

“System and Method for Anti-Moiré Imaging
in a One Dimensional Sensor Array”

ABSTRACT OF THE DISCLOSURE

[0044] A device and process which eliminates potential moiré patterns in digitized
5 images by employing a one-dimensional sensor array and a sampling method of the
sensor signals which produces a data set of non-uniformly spaced sensor positions.
This allows the spacing of the sensors to avoid having a strong "harmonic" which may
interfere with details or harmonics present in the image source, which eliminates the
occurrence of moiré patterns and the need for application of image processing to
10 remove moiré patterns. Sensors are non-uniformly spaced along a first axis
according to a predetermined scheme or function. Sensors are sampled during
scanning according a non-uniform function in order to realize a non-uniform sampling
scheme in a second dimension. Linear interpolation is applied to the non-uniformly
spaced data set, synthesizing a uniformly-spaced data set for use in common imaging
15 formats and processing.